

REMARKS

The Office Action dated April 9, 2009 was received and carefully reviewed.

By this response, claims 1, 2, 4-9, and 12 are amended to clarify the invention, and not for reasons of patentability. Claims 3, 10, and 11 were canceled by a previous reply. Presently, no claims have been canceled, and no new claims have been added. Thus, claims 1, 2, 4-9, and 12 remain pending in the subject application.

Support for the amendment independent claims 1, 2, 4, and 5 can be seen at least in FIG. 7C and page 22, lines 14-22 of the specification as originally filed. Accordingly, Applicant contends that the amendment to independent claims 1, 2, 4, and 5 do not include new matter.

In view of the above amendments and the following remarks, Applicant respectfully requests reconsideration and allowance of the subject application.

Claim Rejections – 35 U.S.C. § 112

Claims 1, 2, 4-9, and 12 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. However, Applicant contends that the amendments to the claims obviate any perceived failure to comply with the written description requirement which was noted by the Examiner. Accordingly, Applicant respectfully requests the withdrawal of this rejection.

Double Patenting

Applicant contends that the amendments to the claims obviate the double patenting rejection of the claims presented by the Examiner. Accordingly, Applicant respectfully requests the withdrawal of this rejection.

Claim Rejections – Prior Art

Claim 1 stands rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Yara (WO 02/40742 but references being made to the corresponding U.S. Pat. Pub. No.: 2004/0050685 A1) (*Yara*, hereinafter). Claims 1, 4, and 6 are rejected under 35 U.S.C. § 103(a)

as allegedly being unpatentable over Miyakawa (U.S. Patent No.: 6,051,150) (*Miyakawa*, hereinafter) in view of *Yara*. Claims 1, 4, and 6 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Miyakawa* in view of Koinuma et al. (U.S. Patent No.: 5,549,780) (*Koinuma*, hereinafter). Claims 2, 5, 7, 8, and 12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Miyakawa* in view of *Yara* and in further view of Inoue (JP 07-024579) (*Inoue*, hereinafter). Claims 2, 5, 7, 8, and 12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Miyakawa* in view of *Koinuma* and in further view of *Inoue*. Claim 9 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Miyakawa* in view of *Yara* and in further view of Seki (JP 11-340129) (*Seki*, hereinafter). Claim 9 stands rejected 35 U.S.C. § 103(a) as allegedly being unpatentable over *Miyakawa* in view of *Koinuma* and in further view of *Seki*. Applicant traverses this rejection for at least the reasons set forth below.

The present independent claims 1, 2, 4, and 5, and the claims dependent therefrom, are patently distinguishable over *Yara*, *Miyakawa*, *Koinuma*, *Inoue*, and *Seki*, since *Yara*, *Miyakawa*, *Koinuma*, *Inoue*, and *Seki*, either taken alone or in combination, fail to disclose, teach or suggest all of the features recited in pending independent claims 1, 2, 4, and 5. For example, independent claim 1 (emphasis added) recites:

1. A manufacturing method of a display device in a plasma treatment chamber comprising the step of:
forming a wiring by partially etching a conductor film over a substrate by discharging a plasma to the plasma treatment chamber from a plasma treatment means having one set of electrodes contained therein for generating the plasma at a pressure of 5 to 800 Torr from a reactive gas introduced to the plasma treatment means,
wherein the plasma treatment means is provided in the plasma treatment chamber,
wherein one electrode of the set of electrodes surrounds the other electrode of the set of electrodes, and
wherein a distal portion of each of the other electrode of the set of electrodes has a sharp angle shape.

Independent claim 2 (emphasis added) recites:

2. A manufacturing method of a display device in a plasma treatment chamber comprising the step of:

forming a wiring by partially etching a conductor film over a substrate by discharging a plasma to the plasma treatment chamber from a plasma treatment means having a plurality of sets of electrodes contained therein for generating the plasma at a pressure of 5 to 800 Torr from a reactive gas introduced to the plasma treatment means,

wherein the plasma treatment means is provided in the plasma treatment chamber,

wherein one electrode of the plurality of sets of electrodes surrounds the other electrode of the plurality of sets of electrodes, respectively, and

wherein a distal portion of each of the other electrode of the plurality of sets of electrodes has a sharp angle shape.

Independent claim 4 (emphasis added) recites:

4. A manufacturing method of a display device comprising the steps of:

forming a conductor film over a substrate;

forming a resist mask over the conductor film; and

partially etching the conductor film at a pressure of 5 to 800 Torr by discharging a plasma to a plasma treatment chamber from a plasma treatment means having one set of electrodes contained therein for generating the plasma from a reactive gas introduced to the plasma treatment means, over the resist mask thereby forming a wiring,

wherein the plasma treatment means is provided in the plasma treatment chamber,

wherein one electrode of the set of electrodes surrounds the other electrode of the set of electrodes, and

wherein a distal portion of each of the other electrode of the set of electrodes has a sharp angle shape.

Independent claim 5 (emphasis added) recites:

5. A manufacturing method of a display device comprising the steps of:

forming a conductor film over a substrate;

forming a resist mask over the conductor film; and

partially etching the conductor film at a pressure of 5 to 800 Torr by discharging a plasma to a plasma treatment chamber from a plasma treatment means having a plurality of sets of electrodes contained therein for generating the plasma from a reactive gas introduced to the plasma treatment means, over the resist mask thereby forming a wiring,

wherein the plasma treatment means is provided in the plasma treatment chamber,

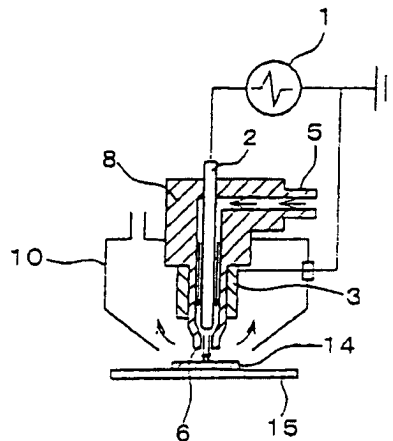
wherein one electrode of the plurality of sets of electrodes surrounds the other electrode of the plurality of sets of electrodes, respectively, and

wherein a distal portion of each of the other electrode of the plurality of sets of electrodes has a sharp angle shape.

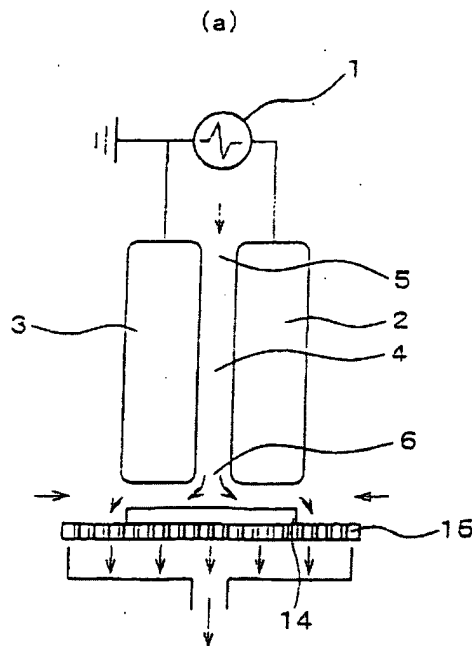
Thus, independent claims 1 and 4 are directed to, *inter alia*, the feature of a distal portion of each of the other electrode of the set of electrodes has a sharp angle shape. Further, independent claims 2 and 5 are directed to, *inter alia*, the feature of a distal portion of each of the other electrode of the plurality of sets of electrodes has a sharp angle shape.

Applicant respectfully submits that *Yara*, *Miyakawa*, *Koinuma*, *Inoue*, and *Seki*, either taken alone or in combination, fail to disclose, teach, or suggest at least the feature of a distal portion of each of the other electrode of the set of electrodes has a sharp angle shape, as recited in independent claims 1 and 4. Furthermore, Applicant respectfully submits that *Yara*, *Miyakawa*, *Koinuma*, *Inoue*, and *Seki*, either taken alone or in combination, fail to disclose, teach, or suggest at least the feature of a distal portion of each of the other electrode of the plurality of sets of electrodes has a sharp angle shape, as recited in independent claims 2 and 5.

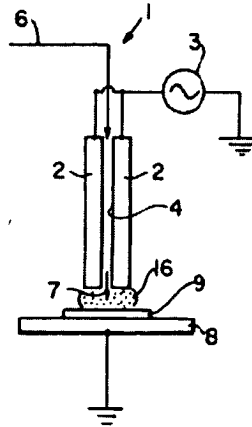
Yara appears to disclose a unit whereby plasma gas is blown to an article to be treated using a solid dielectric nozzle of the coaxial cylinder type electrode 2, 3 (see *Yara*, e.g., paragraph [0085] and FIG. 7), or that . However, as seen below in FIG. 7 of *Yara*, the distal portions of both electrodes 2, 3 are both blunt, and thus lack the sharp angle shape, as recited in present independent claims 1, 2, 4, and 5.



Moreover, as the Examiner correctly admits on page 3 of the Office Action, *Yara* also appears to disclose “a plasma means using parallel flat electrode setup”. As seen below in FIG. 8(a) of *Yara*, the distal portions of both electrodes 2 and 3 are blunt, and thus lack the sharp angle shape (the electrodes in FIG. 8(b) also have the same blunt shape as seen below), as recited in present independent claims 1, 2, 4, and 5.



Furthermore, *Miyakawa* discloses (emphasis added) a “[s]urface processing apparatus 1 is of a so-called ‘line type’, and comprises a pair of electrodes 2 which may be vertically disposed opposite to each other with a predetermined space therebetween defining a gap 4” (see *Miyakawa*, e.g., FIG. 1, col. 4, lns. 52-56), as seen in the below surface processing apparatus portion of FIG. 1. Thus, as seen below the electrodes 2 of *Miyakawa* also have blunt distal end portions, and thus lack the sharp angle shape, as recited in present independent claims 1, 2, 4, and 5.



Applicant contends that neither *Koinuma*, *Inoue*, nor *Seki* make up for the above-recited deficiencies of *Yara* and/or *Miyakawa*. Thus, neither *Yara*, *Miyakawa*, *Koinuma*, *Inoue*, nor *Seki*, either taken alone or in combination, anticipate or render obvious all the features recited in the independent claims 1, 2, 4, and 5. Accordingly, Applicant respectfully requests the withdrawal of the rejection, and the allowance of independent claims 1, 2, 4, and 5.

Claims 6-9 and 12 are allowable at least by virtue of their dependency from one of the independent claims, but also because they are distinguishable over the cited prior art.

In view of the foregoing, it is submitted that the present application is in condition for allowance and a notice to that effect is respectfully requested. If, however, the Examiner deems that any issue remains after considering this response, the Examiner is invited to contact the undersigned attorney/agent to expedite the prosecution and engage in a joint effort to work out a mutually satisfactory solution.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 19-2380. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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